

Learning

Why Learning?

Education reform will continue
to fail to change
the outcomes for millions of children
until educators
change the definition of learning

Resistance to Change

- Everyone resists changing mental models.
- We make assumptions and instantly leap to a conclusion
- We have deeply held values and beliefs

History

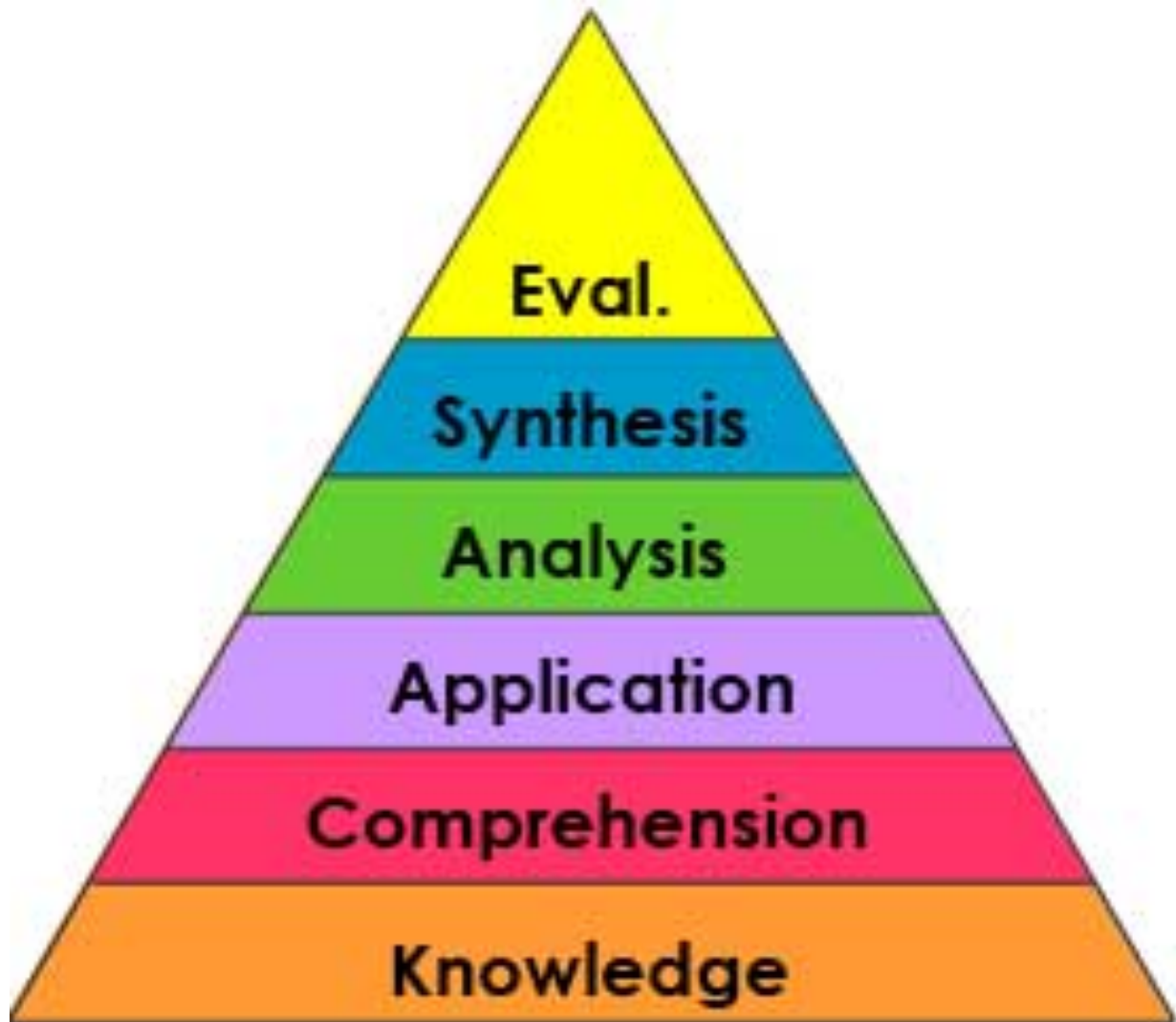
Bloom's Taxonomy

- first presented in 1956
- classification of learning objectives for students within education
- foundational and essential element within the education community

Current Definition of Learning

- Accumulation of knowledge and skills
- Actuated or actionable knowledge
- Acquiring knowledge

Bloom's Taxonomy



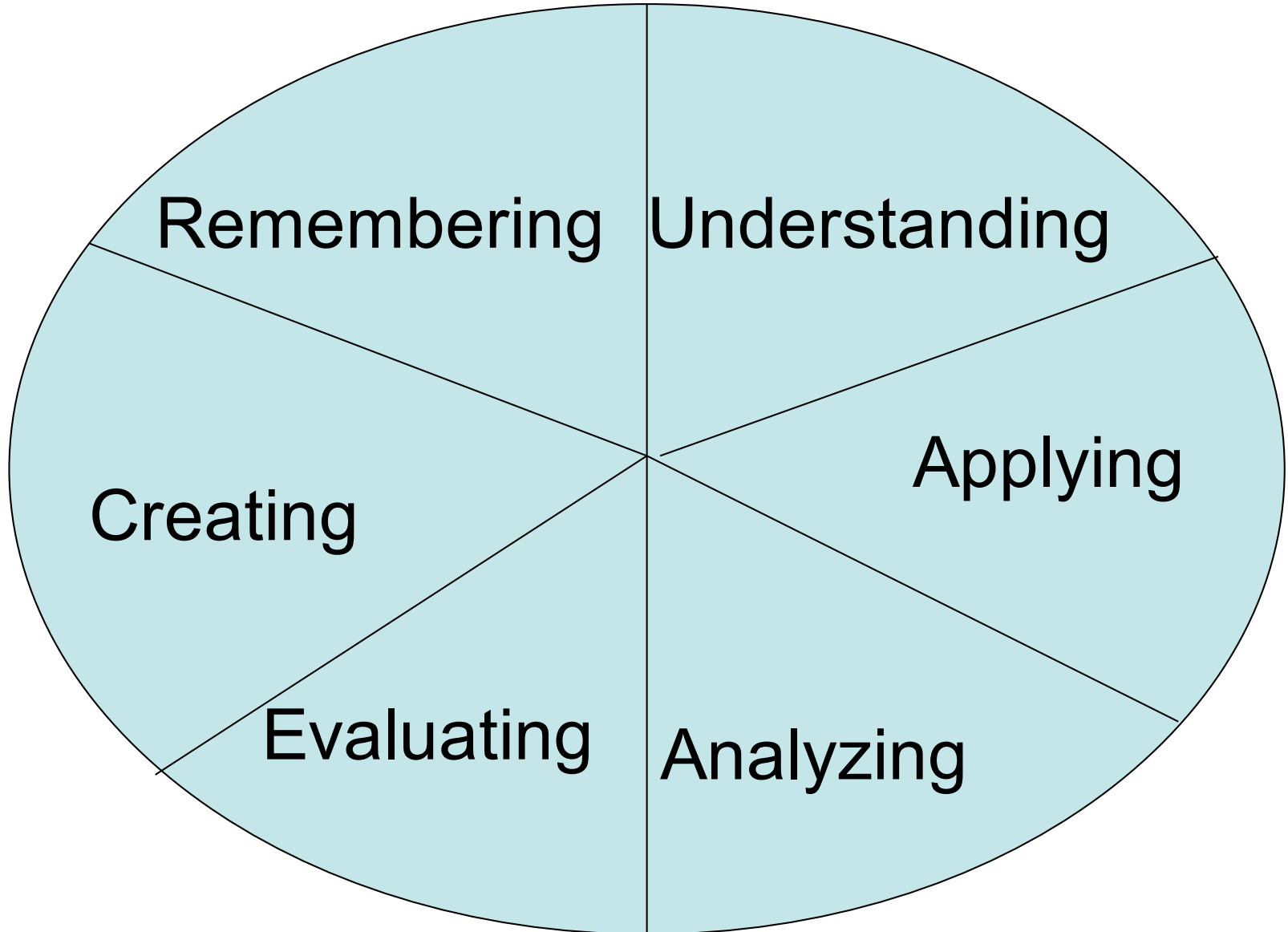
Teachers

Teachers work at the bottom
of Bloom's pyramid

Revised Bloom's Taxonomy



21st Century Taxonomy



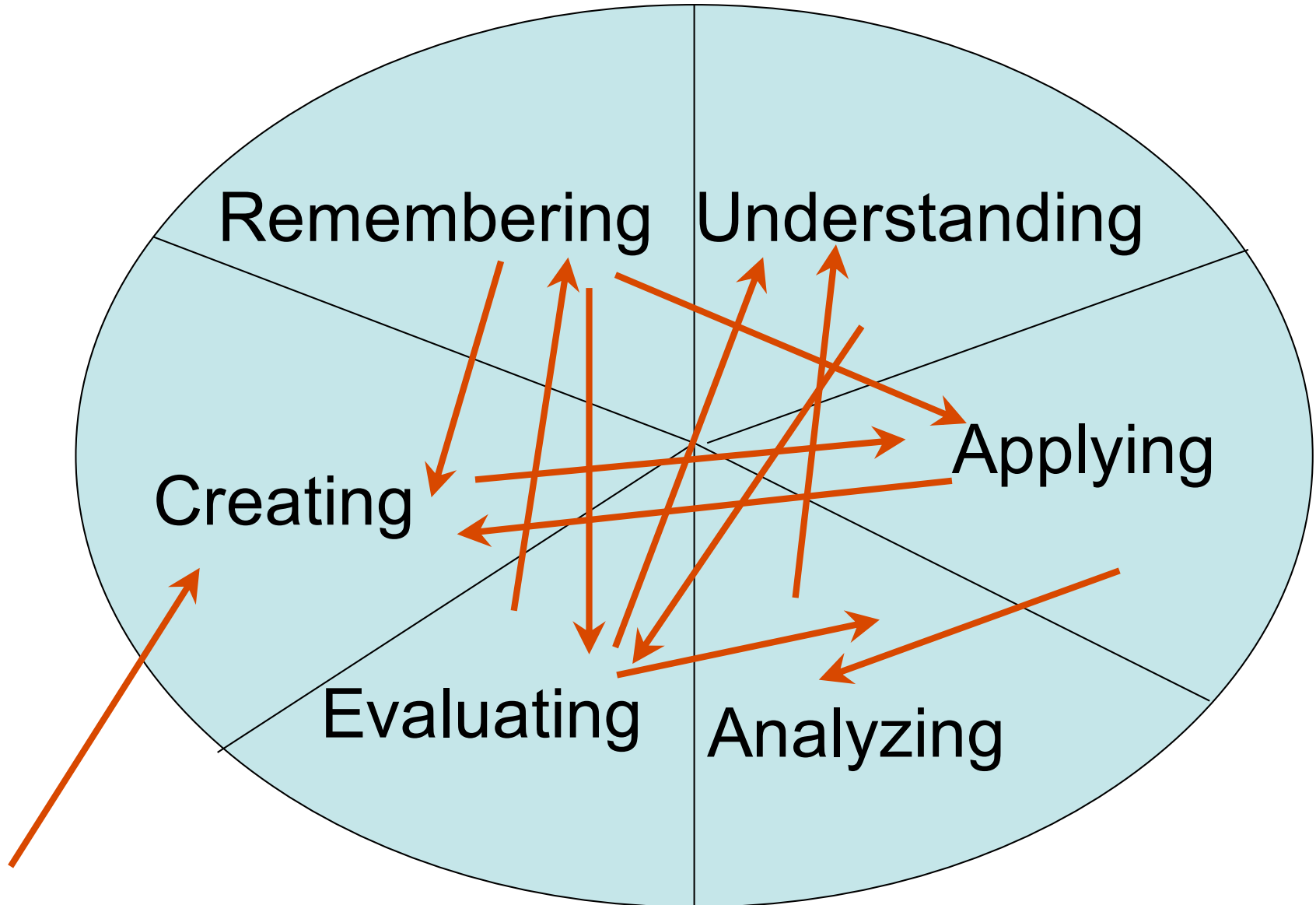
Students

- World view, mental model, paradigms
- Already have experience with evaluating, analyzing and creating

THE PROBLEM:

No one has shown them how to
change their mental models

21st Century Taxonomy



New Definition of Learning

Learning happens
when a mental model
changes

Why Change Mental Models?

Because they are wrong,

However

Some mental models are useful

How do we change Mental Models?

- We ask ourselves “What if?” questions
- We ask others “What if?” questions
- We make our assumptions explicit
- We specify feedback loops

How do we change Mental Models?

- We diagram circular causality
- We reflect and communicate
- We revise our mental model
- Then we start over again

New Definition of Learning

Learning happens
when a mental model
changes

New Definition of Learning

Will lead to:

- Educators changing subject standards and then
- States changing standards and assessments and then
- Educators changing curriculum

Teachers

Teachers will work everywhere
in Bloom's Taxonomy

Conclusion

Educators will change
the outcomes for millions of children
when

Educators change the
definition of learning